

State of California  
Department of Water Resources  
State Water Resources Control Board  
Department of Health Services

2002 RECYCLED WATER TASK FORCE  
MINUTES OF  
12 JULY 2002 MEETING

**Meeting Time and Location**

10:00 am-3:00 pm, 12 July 2002, Headquarters Building, Santa Clara Valley Water District,  
5700 Almaden Expressway, San Jose, California.

**Attendance**

Task Force Members:

Rich Atwater	Earle Hartling (telephonic)	Gary R. Lynch
Kirk Bone	Rex Hime (telephonic)	Jonas Minton
Jerry D. Brown	Keith Israel	Mansour M. Nasser
Dan Carlson	Laura Johnson	William Steele
Bob S. Castle	Denise L. Kruger	William T. VanWagoner
Herman C. Collins	Keith Lewinger	Marguerite Young

Task Force Substitutes:

Rafael Mujeriego for William R. Everest  
Stuart Posselt for Tom Morrison  
Mark Tettemer for Darryl G. Miller  
David Witter for Ane D. Deister

Task Force Members Absent:

Takashi Asano	Rick Martin	David P. Spath
Gary Erbeck	Tom Morrison	Frances Spivy-Weber
Kathy Fletcher	Phillip J. Pace	Bob Whitley
Karen Furst	Tim Ramirez	John B. Withers
Steve Hall	Steve Shaffer	Patrick Wright
Richard Katz	R. K. Spackman	

Invited Guests:

Larry Wilson, Director, Santa Clara Valley Water District  
RoseMary Camay, Board Chair, Santa Clara Valley Water District

Facilitator:

H. Eric Schockman

State Staff and Members of Public:

22 Persons (See attachment for complete list)

### **Summary of Proceedings**

#### **A. Self-Introduction and Welcome Remarks**

The Chair of the Task Force, Richard Katz, being absent, Co-chair Jonas Minton chaired the meeting, assisted by facilitator Eric Schockman. Welcoming remarks were offered by Larry Wilson, Director from District Four of the Santa Clara Valley Water District (SCVWD) and RoseMary Camay, Board Chair of the SCVWD. Wilson noted the history of reusing wastewater since at least 1960. They said that it is district policy to meet five percent of its water demand with recycled water by 2010 and ten percent by 2020 and that the district has achieved 2.1 percent.

#### **B. Approval of 3 June 2002 Meeting Minutes**

A draft of the minutes of the 3 June 2002 meeting of the 2002 Recycled Water Task Force, dated 11 July 2002, was distributed for review. Approval was postponed until the 12 September 2002 meeting.

#### **C. Summary of Activities Since 12 July 2002**

Fawzi Karajeh gave a report on Task Force activities since the 12 July 2002 meeting. Five of the six workgroups have been established and four have had their first meeting. The Economics Workgroup remains to be created. He reviewed the meeting dates of the various workgroups and agreed to provide a list of dates to the Task Force. He also provided clarification of the “white papers” from each workgroup. These papers are the workgroup reports to the Task Force containing the issues studied by the workgroups, related background, problem descriptions, and potential recommendations for consideration by the Task Force. The white paper for each workgroup will be a standalone document. Each workgroup has narrowed down the potential issues to a few that have high priority and can be dealt with in the time frame of the Task Force.

There was discussion on the decision-making process of the workgroups and Task Force. The objective is to have all recommendations from the workgroups and Task Force be reached by consensus because such recommendations have the greatest chance of implementation. However, if consensus cannot be reached, the options for addressing an issue will be presented to the Task Force with the background analysis.

There was question what “consensus” meant. Minton stated that it is general agreement, arrived at various ways but not by voting. It is looking for areas of common agreement that all stakeholders can live with even if they are not fully supportive. He stressed that workgroups should work at refashioning recommendations until consensus is reached.

Concern was expressed that there are few public representatives on the Task Force and those few have limited time to participate fully in all of the workgroups. The Task Force contains members ranging from acute expertise in particular areas to general expertise. There was concern that the Task Force members that are trying to educate themselves on the full spectrum of issues under consideration will have too few resources, namely time, to understand the issues and feel comfortable with the recommendations. It was stressed that recommendations need to be supported by background information accessible to all members of the Task Force and that all members need to feel free to ask questions and have the responsibility to ask questions to achieve a full understanding of the issues.

Minton noted that the composition of the workgroups included persons solicited by staff because of their expertise or special value to a workgroup and other persons who volunteered of their own accord. The intent was to ensure that the composition adequately represented the viewpoints likely to be concerned about the group of issues within each workgroup. Thus, the expectation is that if consensus is reached within a workgroup, its recommendations are likely to be acceptable to the Task Force. However, the Task Force will be able to deliberate the recommendations further.

It was pointed out that anyone can attend workgroup meetings. Furthermore, if one has insufficient time to fully participate, one can alert a workgroup of his or her concerns so the workgroup is conscious of them during its deliberations. If a workgroup appears to be missing particular viewpoints, staff can help to remedy that.

Concern was also brought up that the Task Force and workgroups are not only weighted in favor of experts that may not be representative of general public concerns, but also that there appears to be a preponderance of a special interest viewpoint that outweighs others, for example, public health specialists.

Rich Atwater suggested that the Task Force provide a briefing to the California Water Commission later this year and especially note the federal funding recommendations of the Task Force. The commission, on behalf of the Governor, make recommendations of federal funding in the context of CALFED and more broadly.

Bob Hultquist reported on the Plumbing Code/Cross Connection Control Workgroup. He referred to a handout related to this workgroup. The workgroup has identified its scope, established a schedule, and made assignments for the components of the scope it is addressing. Appendix J of the Plumbing Code is a primary focus. It appears that Appendix J was never adopted by a California agency. Options related to Appendix J will be evaluated. The workgroup will also be addressing cross connection regulations in Title 17 of the California Code of Regulations, water recycling criteria for dual plumbed sites in Title 22, and water works standards, for example, pipe separation requirements.

The question was raised whether the Plumbing Code workgroup would be undertaking a scientific evaluation of risk assessment. Hultquist responded that the workgroup was not equipped to do that. However, where such an assessment seemed to be warranted, the

workgroup would recommend that it be done. John Morris clarified that while the workgroup cannot answer all questions, it can map out the course of action to achieve a solution.

Jerry Brown represented the Regulations and Permitting Workgroup. He referred to a summary of the five issues being addressed by the workgroup, which was a distillation of a longer list of potential issues to consider. The workgroup is trying to identify examples of situations where these issues have been an impediment to water reuse. He solicited input from the Task Force. He also referred to a schedule for the workgroup activities.

Laura Johnson raised two concerns she would like to be addressed or acknowledged by the Regulations Workgroup. One is that some local planning agencies have ordinances that are not supportive of dual plumbing. Work needs to be done to make them supportive. Senate Bill No. 2095 was intended to help with that, but it has no teeth. Also, some local planning agencies condition permits for water recycling facilities on contributing to other public works or community amenities unrelated to the water recycling project. Marguerite Young asked that the water softener issue be widened to include the introduction of other chemicals into the sewer system that affect the quality of recycled water.

Hultquist reported on the Science and Health/Indirect Potable Reuse Workgroup with a handout. The primary focus is on groundwater recharge, which is a potentially very large use in California. The workgroup will also address impediments to other uses, the need to reconvene the California Potable Reuse Committee, the impact of water softeners, the one molecule rule, and the use of the University of California faculty to provide multidisciplinary support for water reuse.

Diana Robles reported on the Funding/CALFED Coordination Workgroup with a handout of the issues. The six issues of focus are identifying the local share financial contribution to water recycling projects, identifying all benefits of water recycling projects, project and regional planning—actual delivery of recycled water, coordination of sources and timing of funding, determination of benefits resulting from state and federal funded projects in terms of actual delivery of recycled water, and funding procedures of state and federal funding programs.

While the Public Education and Outreach Workgroup has not met, Herman Collins said that he hopes the group will identify the public participation practices that have worked in successful projects. The first meeting is scheduled for 16 July 2002. A comment was provided that recommended that the workgroups look at an overall public outreach/education program at the statewide level similar to what has been done in water conservation or anti-smoking. Such a program would make the public less susceptible to manipulation by politicians.

Karajeh reported that some people have volunteered to be on the Economics Workgroup but that a Chair and Co-Chair are being sought.

#### **D. Plumbing Code Expert Presentations**

Two in-depth presentations using slides were given on behalf of the Plumbing Code/Cross Connection Control Workgroup. Copies of the slides were distributed. The first presentation

was by Stuart Posselt. He explained the structure and role of the California Building Standards Commission, the building codes and procedures for adoption and enforcement.

There was considerable confusion and discussion regarding the applicability of appendices to the Uniform Plumbing Code to local government. This confusion was not resolved. It appears that unless an appendix has been adopted by a state agency with the intent that it apply to local agencies, local agencies are obligated to adopt the appendix. However, it appears that many local agencies do not understand this and adopt the Uniform Plumbing Code with appendices. Suggestions were that Appendix J be revised to the satisfaction of California state agencies and adopted for use throughout California.

The second presentation was by Bob Castle. He discussed the history of dual plumbing in buildings in California, the legislation and committee leading to the drafting of Appendix J of the Uniform Plumbing Code, the perceived flaws in the current language of Appendix J, and the design features in practice that safeguard public health in the use of recycled water in buildings. He also discussed related regulations in Titles 17 and 22 of the California Code of Regulations. Copies of his slides were distributed.

#### **E. Video on Water Recycling**

Pat Ferraro presented a video, developed by the WateReuse Association and intended for broadcast on television. During the lunch break the video was played. He explained to the Task Force that he is lobbying the WateReuse Foundation to reprint it on DVD at low cost to distribute to public and school libraries throughout California.

#### **F. Public Education and Outreach Expert Presentations**

Two in-depth presentations were given on behalf of the Public Education and Outreach Workgroup. The first presentation was by Herman Collins. He stressed the need to involve the public in project assessment and decision-making. While the public may not have the hands-on expertise, with enough information they can be entrusted to make critical decisions. A consensus-based approach to decision-making can provide a mechanism to mitigate the opposition that can prevent project implementation. He posed the question whether agencies involved the public as advisors or decision-makers. He felt that the public's role must include being part of making decisions. Collins provided a handout, "Summary of the Workshop on Public Participation in Environmental Assessment and Decision Making," a summary of a workshop sponsored by the National Research Council. He felt that this summary was a valuable assessment of what public agencies have done to involve the public in decision-making. He discussed some of the findings in the summary.

Collins noted the tendency of professionals to view public fears as "unfounded fears" and proceed with their course of action. Instead, the public's fears need to be viewed as real, and the time must be invested in educating the public and drawing them into the decision-making process. There is also a tendency not to acknowledge the unknowns, the factors of uncertainty, and this accentuates the public fears.

The second presentation addressing public education and outreach was by Keith Israel, General Manager of the Monterey Regional Water Pollution Control Agency. He described the history of the Salinas Valley agricultural irrigation project using recycled water from his district's wastewater treatment plant. Extensive studies were conducted to demonstrate the effectiveness and safety of using recycled water on crops, including crops eaten raw. Growers were involved throughout the process. One key concern was the ability to market their crops without the stigma of being grown with recycled water. Marketability studies demonstrated that crops could be marketed without special labelling that would alarm consumers. Even after the project commenced operation, growers expressed new concerns over safety and marketability. The agency has been responsive and conducted additional studies to reassure the growers. Factors of success of the agency's project were involvement of a wide range of perspectives in an advisory committee to the field-testing during project planning, placing the county health officer in charge of the committee to assure everyone that safety was a priority concern, and the creation of an ongoing grower advisory committee.

Israel presented results of consumer surveys conducted at shopping malls in Minneapolis and Miami to gauge public knowledge and perception of recycled water and their reaction to various terms used in place of recycled water. They were most favorable to "repurified water" and "recycled water" and least receptive of "reclaimed wastewater." The agency also conducted local surveys to determine the public knowledge of water supply and quality problems, the role of the agency, the awareness of the potential uses of recycled water. While there was overwhelming support for using recycled water, about half of respondents had safety concerns.

There was some discussion of the effectiveness of attempting to use terms for recycled water that mask the source of the water. The invention of "repurified water" did not prevent the term "toilet-to-tap" from surfacing. An observation from one agency was that it is essential to be absolutely up front about what recycled water is and educate the public about water problems and the role water recycling can play. Collins responded that we should pursue the uses of recycled water for which there is general support, and take the time to educate the public on those uses for which they have significant concern before pushing them. While consumers have the choice to smoke cigarettes despite the warning messages, they are not forced to. Likewise, consumers should not be forced to drink recycled water; it should be a choice they have arrived to.

It was pointed out that unplanned water reuse occurs: Southern Californians drink the water discharged from wastewater plants in Sacramento or Las Vegas. Yet this water does not receive the same stigma as recycled water. Collins responded, "Things that I can't do anything about, I accept. Things that I can do something about, I don't accept." Over time the lack of acceptance can be achieved by knowledge and exposure to less threatening uses of recycled water, such as freeway irrigation, such that the public becomes comfortable with the concept of more direct exposure through drinking.

Keith Lewinger noted that we have been pushing water reclamation for over 25 years and seem to be fighting recurring battles with new opponents, particularly as projects are proposed in new areas with a new constituency. To put time into perspective, Collins responded that people have

been preaching salvation since Jesus left, and after 2,000 years they still have not gotten the message, but you have to continue to preach it.

A comment emphasized that recycled water is only one component in the overall water quality/water resources picture. The highest quality water should be reserved for uses most needing it. Also, the fact that freshwater sources have potential quality problems, we should not lower the standard to the status quo.

Some other comments were:

- ♦ Public education needs to include educating the elected leadership.
- ♦ While the emphasis of the Task Force is on removing impediments to using recycled water, we should be first evaluating whether some impediments are appropriate to retain

## 2002 RECYCLED WATER TASK FORCE ATTENDEES AT 12 JULY 2002 MEETING

Suzanne Arena	San Francisco Public Utilities Commission
Alan Arroyo	Department of Water Resources
Hossein Ashktorab	Santa Clara Valley Water District
Rich Atwater	Inland Empire Utilities Agency
Fethi BenJemaa	Department of Water Resources, Office of Water Use Efficiency
Kirk Bone	Serrano Associates LLC
Kevin Booker	Sonoma County Water Agency
Jerry D. Brown	Contra Costa Water District
Dan Carlson	Utilities Department, City of Santa Rosa
Bob S. Castle	Marin Municipal Water District
Herman C. Collins	Collins Strategic Group, Inc.
Jennifer Durkin	City of San José, South Bay Water Recycling
Pat Ferraro	Santa Clara County Pollution Prevention Center
Paul Goeltz	Santa Clara Valley Water District
Steven L. Goodbred	USGS/NAWQA, Western Region, California State University
Earle Hartling*	Sanitation Districts of Los Angeles County
Rex Hime*	California Business Properties Association
Bob Hultquist	Department of Health Services
Keith Israel	Monterey Regional Water Pollution Control Agency
Laura Johnson	Recycled Water Authority, Dublin-San Ramon/East Bay Municipal Utility District
Fawzi Karajeh	Department of Water Resources, Office of Water Use Efficiency
Bob Kenton	Santa Clara Valley Water District
Luana Kiger*	Department of Water Resources, Office of Water Use Efficiency
Nancy King	Department of Water Resources
Denise L. Kruger	Customer Service Region II, Southern California Water Company
Keith Lewinger	Fallbrook Public Utility District
Gary R. Lynch	Park Water Company
Richard Mills	State Water Resources Control Board
Jonas Minton	Department of Water Resources
Cliff Moriyama*	California Business Properties Association
John T. Morris	Metropolitan Water District of Southern California
Rafael Mujeriego	Orange County Water District
Cheryl Muñoz	San Francisco Public Utilities Commission
Mansour M. Nasser	San Jose Municipal Water System, City of San Jose
Hoover H. Ng	Water Replenishment District of Southern California
Carol Nigh	Santa Clara Valley Water District
Stuart Posselt	California Building Standards Commission
Melanie Richardson	Santa Clara Valley Water District
Diana Robles	State Water Resources Control Board, Division of Clean Water Programs
H. Eric Schockman	University of Southern California
William Steele	Bureau of Reclamation, Southern California Area Office
Walter Swain	U.S. Geological Survey
Mark Tettermer	Central Basin and West Basin Municipal Water Districts
William T. VanWagoner	East Valley Water Recycling Project, Los Angeles Department of Water and Power
Alan Vargas	California Department of Food and Agriculture
David Witter	El Dorado Irrigation District
Marguerite Young	California Clean Water Action

\* By telephone



2002 RECYCLED WATER TASK FORCE  
LIST OF HANDOUT MATERIALS FOR 12 JULY 2002 MEETING

1. 2002 Recycled Water Task Force, Meeting Agenda, July 12, 2002
2. Department of Water Resources, "Water Recycling Terms", no date
3. Department of Water Resources, "2002 Recycled Water Task Force, Workgroups: Membership, Charges and Issues," Draft 7/11/2002
4. Department of Water Resources, "2002 Recycled Water Task Force Regulations and Permitting Workgroup: Schedule," 10 July 2002
5. Department of Water Resources, "2002 Recycled Water Task Force Regulations and Permitting Workgroup: Issues for Focus of Workgroup," 11 July 2002
6. "2002 Recycled Water Task Force, 12 July 2002, Plumbing Code/Cross Connection Control Workgroup," 12 July 2002
7. "2002 Recycled Water Task Force, 12 July 2002, Science and Health / Indirect Potable Reuse Workgroup," 12 July 2002
8. "2002 Water Recycling Task Force, Funding/CalFed Coordination Subgroup, Issues/Subgroup Participation," undated
9. "The 2002 Recycled Water Task Force's Work Schedule," no date
10. "2002 Recycled Water Task Force Minutes of 3 June 2002 Meeting," Draft 7/11/2002
11. "2001 California Code of Regulations Title 24 Questions and Interpretations Contact List," no date
12. California Building Standards Commission, "Building Standards Bulletin 99-01: Applicability of California Building Standards and Local Government Amendments Thereto," March 17, 1999
13. "Welcome to the California Building Standards Commission," PowerPoint slide handout presented by Stuart L. Posselt
14. "2002 Recycled Water Task Force, July 12, 2002, California Plumbing Code" PowerPoint slide handout presented by Bob Castle, July 12, 2002
15. Seth Tuler, "Summary of the Workshop on Public Participation in Environmental Assessment and Decision Making 14 December, 2001", National Research Council, 14 December 2001
16. "2002 Recycled Water Task Force, Plumbing Code / Cross Connection Control Workgroup," July 2, 2002 (Meeting packet).

State of California  
Department of Water Resources  
State Water Resources Control Board  
Department of Health Services

**2002 RECYCLED WATER TASK FORCE**

**July 12, 2002, 10:00 a.m. to 3:00 p.m.**  
**Santa Clara Valley Water District Headquarters Bldg., Board Room**  
**5700 Almaden Expressway**  
**San Jose, California 95118**  
**(408) 265-2600**

---

**MEETING AGENDA**

*(Times are approximate)*

- 10:00-10:15** *Self-introduction of meeting attendees*
- 10:15-10:20** *Approval of June 3, 2002 meeting minutes*
- 10:20-10:45** *Progress to date: Staff / Workgroups*
- 10:45-11:35** *Plumbing Code Expert Presentations*  
*Bob Castle / Earle Hartling*  
*Tom Morrison / Stuart Posselt*
- 11:35-12:00** *Discussion*
- 12:00-12:30** *Lunch Break*
- 12:30-13:00** *Follow-up / Summary: Plumbing Code Workgroup (working lunch)*
- 13:00-13:50** *Public Education & Outreach Expert Presentations*  
*Herman Collins*  
*Keith Israel*
- 13:50-14:20** *Discussion*
- 14:20-14:35** *Public questions and comments*
- 14:35-15:00** *Future Task Force meetings and strategy*
- 15:00** *Adjourn*